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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/029,553 | 12/20/2001 | Matthew J. Birdsall | P105 CON 3 | 6097 |

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EXAMINER

THALER, MICHAEL H

ART UNIT PAPER NUMBER

3731

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/029,553

Applicant(s)

Birdsall

Examiner

Michael Thaler

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— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 21, 2003
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-41 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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The disclosure is objected to because of the following informalities: Reference numeral 13'' found on page 12, line 16 is absent from the drawings. Appropriate correction is required.

Claims 26, 27, 29, 30, 33-35 and 39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 20 is limited to the embodiment of figure 3B since only this embodiment shows top and bottom sides which are substantially flat and left and right sides which are substantially curved. However, this shape is not ellipsoidal as defined in claim 26. In claim 27, it is not clear what "elliptorectangular" means. Claim 33 has a similar problem. Claim 29 is confusing and inaccurate since there is no "edge" between the bottom side and the left side of the shape shown in figure 3B. Claims 30, 34 and 35 have similar problems. Claim 39 is limited to the embodiment of figure 3B since only this embodiment shows top and bottom sides which are substantially flat and left and right sides which are substantially curved. However, there is no "edge" (as defined in claim 37, from which claim 39 depends) in this embodiment for the reasons set forth above.

Claims 37, 38, 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Disclosure in view of Alt et al. (5,843,117). Applicant admits that the stent shown in figure 2C of applicant's disclosure is prior art. This shape fails to

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include a smooth rounded edge between the sides. However, Alt et al. teaches that a stent should be machined to round all of its sharp corners in order to facilitate easy movement of the stent through the blood vessel and prevent damage to the blood vessel or balloon (col. 6, lines 31-45, col. 14, lines 60-62 and col. 15, lines 16-18). It would have been obvious to round the corners of the prior art stent shown in figure 2C of the application so that it too would have these advantages.

Claims 20-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Summers (6,080,191) in view of Alt et al. (5,843,117). Summers shows a stent comprising at least one strut having a transverse cross section (shown in figure 19A), the transverse cross section having a top substantially flat circumferential side (at the top of figure 19A), a bottom substantially flat circumferential side (at the bottom of figure 19A), a right side (at the right of the figure) and a left side (at the left of the figure). Summers fails to show the left and right sides as being substantially curved. However, Alt et al. teaches that a stent should be machined to round all of its sharp edges in order to facilitate easy movement of the stent through the blood vessel and prevent damage to the blood vessel or balloon (col. 6, lines 31-45, col. 14, lines 60-62 and col. 15, lines 16-18). It would have been obvious to round the left and right sides (i.e. the left and right edges) of the Summers stent shown in figure 19A so

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that it too would have these advantages. As to claims 20 and 31, note that the Summers strut 150 is so thin as compared to its width (as shown in figure 19A), that the left and right sides shown in this figure are edges. Thus, when following the Alt et al. teaching of round all of sharp edges of a stent strut, it would have been obvious to round the entire left and right sides (edges) of the Summers strut 150. As to claim 21, Summers, in figure 21, shows a plurality of straight sections i.e. the sections of spine 162 between the looped ribs (161 in the figure or 164 in the specification) joined by a plurality of crown sections i.e. the looped ribs 161, 164 as broadly claimed. As to claim 24, Summers, in figure 17, shows stent 122 fused to a second stent 126. As to claim 28, Summers discloses a self expanding stent in col. 5, lines 19-22.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Applicant's arguments filed April 21, 2003 have been fully considered but they are not persuasive. The term "elliptorectangular" does not appear to be a word in the English language. Applicant has not referred to any dictionary which includes this word. If a shape has a portion which is part of an ellipse and part of a rectangle, it is unclear how much of each is required in order to be "elliptorectangular". For example, if a shape has only one straight side instead of four and thus forms

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only part of a rectangle, while the remaining portion of the shape forms part of an ellipse, is this shape "elliptorectangular"? The allegation that figure 3B includes an edge between the bottom side and the left side is incorrect. Although an edge can either be sharp or smooth and rounded, the curved or rounded portion on the left side of figure 3B is the claimed left side rather than an edge. As to claim 37, the prior art shown in figure 2C of applicant's disclosure has a top side which is substantially flat. This prior art also has sharp corners. Alt et al. teaches that a stent should be machined to round all of its sharp corners in order to facilitate easy movement of the stent through the blood vessel and prevent damage to the blood vessel or balloon. Therefore, it would have been obvious to round the sharp corners of the prior art stent shown in figure 2C of the application so that it too would have these advantages.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory

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period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (703) 308-2981. The examiner can normally be reached Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Milano can be reached on (703)308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-3590 for regular communications and (703)305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

mht
May 28, 2003


MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731